



# INITIATIVE 8

## IMPROVE FUNDING PROCESSES

### EXISTING RTA FUNDING PROCESSES AND POTENTIAL IMPROVEMENTS

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As is the case everywhere in the country, transit funding in Massachusetts is extremely limited. Especially now, but also for the future, it is essential that limited resources be used as effectively as possible. During Beyond Boston interviews in the fall of 2011, many RTA Administrators also expressed frustration that the existing funding allocation process:

- Does not tie funding sufficiently to need
- Does not always adequately balance state and federal funds
- Does not reward or encourage local contributions
- Is not sufficiently predictable or transparent
- Does not encourage innovation/experimentation
- Provides funding in arrears, challenging the annual budgeting process

There is a desire on the part of both MassDOT and the RTAs to improve funding allocation processes. MassDOT has worked with the RTAs over the past few years, making several proposals for adjusting the operating and capital funding allocation formulas. Interim changes have been made to the capital funding allocation process, but this is seen as only a temporary improvement until better information on capital needs can be developed. This document describes existing funding sources, the processes that are used to distribute funds, issues, and potential new approaches.

### MASSACHUSETTS OVERALL FUNDING LEVELS

In 2010, Massachusetts provided just over \$2 billion in total transit funding to the MBTA, the RTAs, and other eligible providers. Of this, \$1.6 billion was directed to support transit operations (both the MBTA and the RTAs), and the remaining \$400 million was for capital investments. This represents the eighth highest total level of transit investment in the United States (see Figure 1).

Most states with large metropolitan transit systems, particularly those with high infrastructure costs (for example, with rail service), fund smaller bus-only systems differently than their larger systems. This is also the case in Massachusetts, where a different funding process is used for the MBTA and the RTAs. However, discounting funding for the large systems, Massachusetts still provides a high level of financial support. Since state funding for RTAs exceeds that of all other sources, it is clear that the Commonwealth has a strong interest in ensuring that funds are utilized as effectively as possible.

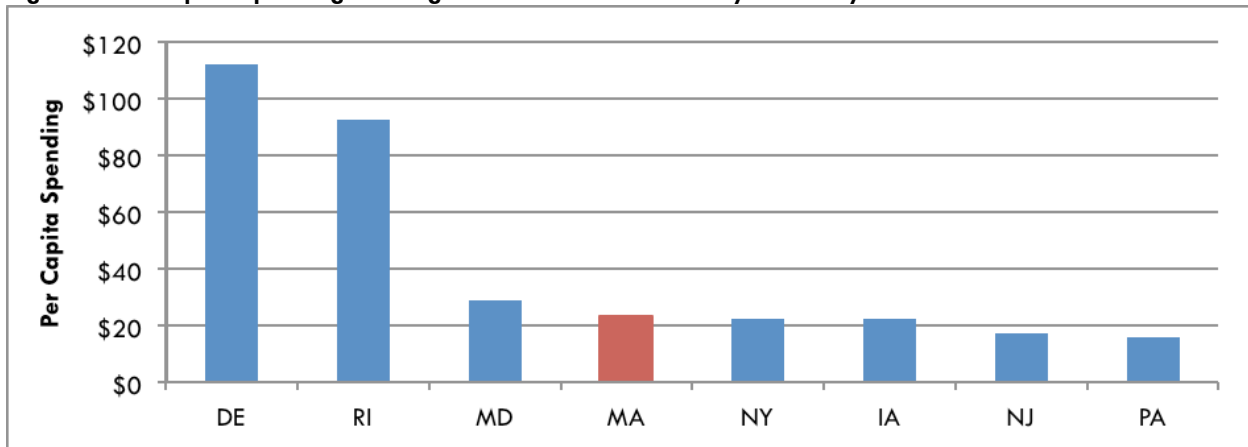


**Figure 1: Transit Funding by State, Top 10 States (in Terms of Combined Operating and Capital Funding, 2010)**



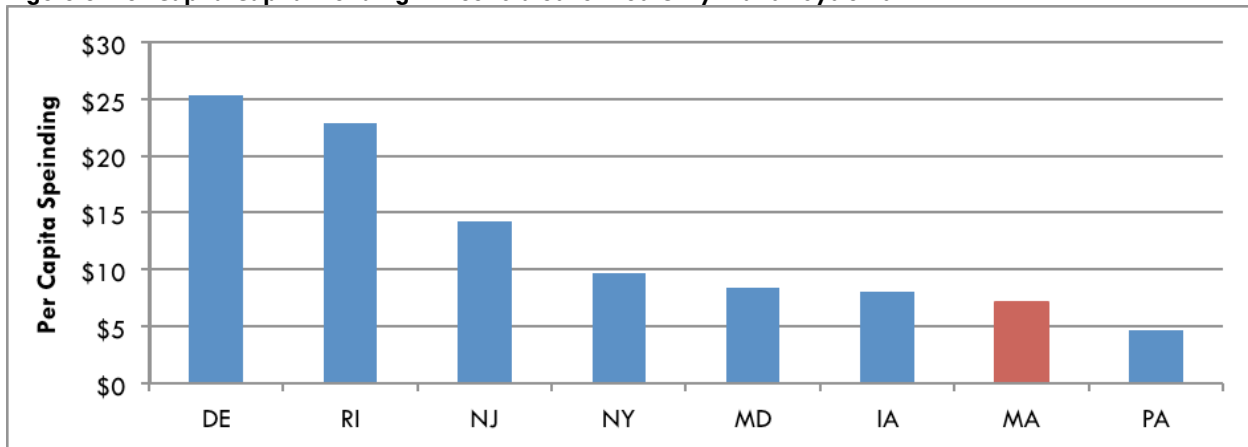
Source: National Transit Database, 2010

**Figure 2: Per-Capita Operating Funding in Peer States for Bus-Only Transit Systems**



Source: National Transit Database, 2010.

**Figure 3: Per-Capita Capital Funding in Peer States for Bus-Only Transit Systems**



Source: National Transit Database, 2010, and NJ "Transportation Capital Program FY 2010."



## FUNDING SOURCES MASSACHUSETTS RTAS

Transit service in Massachusetts is funded through a combination of federal, state, local, and transit system generated funds. Especially at the federal level, there are a large number of funding programs; however, for the Massachusetts RTAs, the overwhelming majority of funding is from:

### Operations

- FTA Section 5307 Urbanized Area Formula Program Operating Assistance
- FTA Section 5307 Capital Assistance Used for Operations<sup>1</sup>
- FTA Section 5311 Formula Grants for Other than Urbanized Areas
- State Contract Assistance
- Local Assessments
- Farebox Revenue

### Capital<sup>2</sup>

- FTA Section 5307 Urbanized Area Formula Program
- FTA Section 5309 Bus and Bus Facilities
- FTA Section 5310 Transportation for Elderly Persons and Persons with Disabilities
- FTA Section 5311 Formula Grants for Other than Urbanized Areas (Section 5311)
- FTA Section 5316 Job Access and Reverse Commute Program
- FTA Section 5317 New Freedom Program
- Congestion Mitigation and Air Quality (CMAQ) Improvement Program
- Massachusetts RTA Capital Assistance Program
- Massachusetts Toll Credits
- Massachusetts Mobility Assistance Program

## Operating Funding

For FY 2012, Massachusetts' RTAs are budgeted to receive and generate a total of \$161.3 million in operating funds. The largest source of funding is State Contract Assistance (\$59.2 million, or 37%), followed by federal FTA funding (\$41.5 million, or 26%), local assessments (\$29.4 million, or 18%), and farebox revenue (\$23.1 million, or 14%) (see Table 1).

**Table 1: RTA Operating Budget Totals for FY2012 in Millions of Dollars**

Funding Source	Total	Percent
State Contract Assistance	\$59.2	37%
Federal Transit Administration (FTA)	\$41.5	26%
Local Assessments	\$29.4	18%
Farebox	\$23.1	14%
Other Revenue*	\$8.1	5%
Total	\$161.3	100%

Source: MassDOT Approved Budget in Net Cost of Service FY 2012 & MassDOR Cherry Sheet FY 2012

\*Other Revenues consist of advertising, parking, sale of capital assets, and interest income.

<sup>1</sup> FTA 5307 capital funds can be used for operating expenses such as preventative maintenance and some ADA complementary paratransit service.

<sup>2</sup> These funding sources do not include "temporary" sources such as ARRA stimulus funds, which over the past few years have been a major source of capital funding for transit. They also do not include state Intermodal Transportation Center Capital Assistance Program funds, which will be phased out in 2014.



## FTA Section 5307 Urbanized Area Formula Funds

FTA Section 5307 Urbanized Area funds are available to transit systems in urbanized areas. In Massachusetts, all RTAs except the three non-urban RTAs (FRTA, NRTA and VTA) receive FTA Section 5307 funds. These funds are split into two different categories based on urban area size:

1. Large urban area funds (with more than 200,000 residents)
2. Small urban area funds (with 50,000 to 200,000 residents)

### Large Urban Area Section 5307 Funds

The FTA allocates Section 5307 funds to each large urban area using a formula that incorporates the following factors:

- Population
- Population density
- Bus revenue vehicle miles
- Bus passenger miles
- Fixed guideway revenue vehicle miles
- Fixed guideway route miles

The funds flow directly from the FTA to a single “designated recipient” in each urbanized area, and all eligible transit operators within each urban area negotiate with the designated recipient a mutually agreeable split of funds. In some cases there are multiple designated recipients in each urbanized area. Based on census definitions, Massachusetts RTAs operate in five large urban areas, which are Boston, Worcester, Springfield, Barnstable, and Providence. Each of these urbanized areas is served by more than one RTA, and many RTAs serve more than one urban area (see Table 2).<sup>3</sup> As a result, all RTAs must negotiate its share of Section 5307 large urban area funds in at least one urban area, and some in two or three. In cases where there are multiple designated recipients in a single urbanized area, the amount of 5307 funds an RTA is initially allocated from FTA may differ from the amount received after funds are distributed locally based on local agreements and negotiations with agencies in that urbanized area.

**Table 2: RTA Service in Large Urban Areas**

RTA	Boston	Worcester	Springfield	Barnstable	Providence
BAT	√				
BRTA					
CATA	√				
CCRTA				√	
FRTA					
GATRA	√			√	√
LRTA	√				
MART	√	√			
MVRTA	√				
MWRTA	√				
NRTA					
PVTA			√		
SRTA					√
WRTA	√	√			
VTA					

<sup>3</sup> In some cases urbanized areas overlap state boundaries.



These funds are generally only available for capital purposes. However, there are a number of exceptions, and through these exceptions, the funds are available for operating purposes such as preventive maintenance and ADA complementary paratransit in areas with more than 200,000 residents. RTAs generally use FTA 5307 funds for operating purposes wherever possible.

### Small Urban Area Section 5307 Funds

Unlike in the large urban areas where funds are allocated separately to each urban areas, each state's total amount of small Section 5307 urban area funds flow to the state and are administered by the "Governor's designee." In Massachusetts, this is MassDOT. MassDOT has discretion over how these funds are allocated between eligible recipients, but distributes them based on population and population density, which is how they are allocated by FTA. Small urban area Section 5307 funds can be used for operating or capital purposes, and eligible RTAs generally maximize the use of these funds for operating purposes.

Fitchburg, New Bedford and Pittsfield are small urbanized areas with populations less than 200,000, meaning that MART, SRTA and BRTA qualify to use 5307 funds for either operating or capital purposes.

### Total Section 5307 Operating Assistance

For FY 2010, Massachusetts RTAs received a total of \$32.6 million in Section 5307 operating assistance. Among eligible RTAs, amounts ranged from a low of \$0.2 million for CATA to a high of \$9.0 million for WRTA (see Table 3).

**Table 3: FTA Section 5307 Funds Used for Operations (millions; FY 2010)**

RTA	Large Urban	Small Urban	Total
BAT	\$1.2	\$0.0	\$1.2
BRTA	\$0.0	\$1.6	\$1.6
CATA	\$0.2	\$0.0	\$0.2
CCRTA	\$4.8	\$0.0	\$4.8
GATRA*	\$0.3	\$0.0	\$0.3
FRTA**	\$0.0	\$0.0	\$0.0
LRTA	\$1.5	\$0.0	\$1.5
MVRTA	\$2.2	\$0.0	\$2.2
MWRTA	\$0.6	\$0.0	\$0.6
MART	\$0.0	\$2.7	\$2.7
NRTA**	\$0.0	\$0.0	\$0.0
PVTA	\$5.4	\$0.0	\$5.4
SRTA	\$0.0	\$3.3	\$3.3
VTA**	\$0.0	\$0.0	\$0.0
WRTA	\$9.0	\$0.0	\$9.0
<b>RTA Total</b>	<b>\$25.1</b>	<b>\$7.5</b>	<b>\$32.6</b>

\*Reflects 5307 funds allocated from the Boston UZA only

\*\*Rural RTAs are not eligible for 5307 funds

Sources: MassDOT, RTA finance staff, and "Commonwealth of Massachusetts Boston Urbanized Area Memorandum of Understanding" April 2016

### FTA Section 5311 Formula Grants for Other than Urbanized Areas

In non-urbanized areas (areas with populations of less than 50,000), transit systems receive FTA Section 5311 Formula Grants for Other than Urbanized Areas. In total, these funds comprise a small amount of funding for most RTAs, but are a major source of funding for FRTA, NRTA and VTA, which are the three RTAs that provide service exclusively in non-urbanized areas, as well as for BRTA, which provides much of its service in non-urbanized areas.



These funds are allocated to the state based on population, and are administered by MassDOT. Eligible RTAs that operate some level of rural service, including just a single route, may apply for 5311 funds for either operating or capital funding through the Community Transit Grant Application. RTAs primarily request 5311 funds for operating due to limited sources of available operating funds.<sup>4</sup> MassDOT directs approximately 73% of Section 5311 funds to the RTAs. The remaining funds are used to support the Intercity Bus Program (14%), and the Rural Transit Assistance Program (3%), as directed by law. MassDOT also retains 10% of program funds for administration. In FY 2011, Massachusetts RTAs received a total of \$2.5 million in FTA Section 5311 funds, which included \$228,096 for BRTA, \$820,665 for FRTA, \$464,745 for NRTA, and \$738,700 for VTA (see Table 4).

**Table 4: FTA Section 5311 Funds (FY 2011)**

RTA	Amount
BAT	\$0
BRTA	\$228,096
CATA	\$22,940
CCRTA	\$46,018
FRTA	\$820,665
GATRA	\$47,306
LRTA	\$7,773
MART	\$36,202
MVRTA	\$0
MWRTA	\$0
NRTA	\$464,745
PVTA	\$32,761
SRTA	\$9,553
VTA	\$738,717
WRTA	\$43,597
<b>Total</b>	<b>\$2,498,373</b>

Source: MassDOT

### State Contract Assistance

State Contract Assistance (SCA) is the major source of state operating assistance for transit. These funds are provided through the Commonwealth Transportation Fund (CTF) and the Massachusetts Transportation Trust Fund (MTTF):

- The CTF is funded through gas taxes, registry fees, and a portion of the 2009 state sales tax increase from 5% to 6.25%. By law, a minimum of \$15 million per year must be provided to the RTAs, and since its inception in 2009<sup>5</sup>, this is the amount that has been allocated.
- The MTTF is funded through Mass Turnpike tolls, Tobin Bridge tolls, departmental revenues of the former Executive Office of Transportation (EOT), Massachusetts Highway Department, and Massachusetts Aeronautics Commission, and appropriations of non-dedicated revenue from the CTF.<sup>6</sup> MTTF funds from the Massachusetts Turnpike tolls and Tobin Bridge tolls are not eligible for transit, but other funds are. In FY2012, MassDOT allocated \$44.2 million of MTTF funds for RTA operations.

By law, Massachusetts must use State Contract Assistance to fund at least 50% of the RTAs' Net Cost of Service, which is the operating deficit after deducting federal operating assistance and RTA-generated revenues (including fares). For FY 2012, a total of \$59.2 million in SCA will be distributed to the RTAs

<sup>4</sup> FTA allows these funds to be used for operations or capital expenditures

<sup>5</sup> Chapter 25 of the Acts of 2009

<sup>6</sup> Independent State Auditor's Report on the Massachusetts Department of Transportation's (MassDOT's) Use of American Recovery and Reinvestment Act Funds, February 17, 2009 through February 27, 2010.



(see Table 5). SCA, in total, will cover 68% of the RTAs' net cost of service, which is equivalent to 37% of total costs.

At present, SCA distributions are based on historical funding levels; current service levels, needs and performance are not considered. In addition, these funds are provided 12 months in arrears, rather than in the year that funds are expended. Between the time of expenditure and receipt of funds, RTAs must borrow money and pay interest to support operations. The receipt of funding 12 months in arrears also increases uncertainty—if state funding is reduced, then spending reductions must occur after funds have already been spent. This can result in more dramatic unplanned cuts in current year spending, to make up for funds already spent.

In 2009, following passage of the Transportation Reform Act, MassDOT and the RTAs began working together to develop a formula-based allocation process that considered need, performance, and other factors. All parties agree that the current process is flawed and inequitable, but have not been able to agree on how changes should be made.

**Table 5: State Contract Assistance (millions; FY 2012)**

RTA	Amount
CATA	\$1.0
CCRTA	\$3.2
BAT	\$4.9
BRTA	\$1.8
FRTA	\$0.7
GATRA	\$2.7
LRTA	\$2.6
MART	\$4.1
MVRTA	\$5.2
MWRTA	\$2.0
NRTA	\$0.4
PVTA	\$16.2
SRTA	\$4.4
VTA	\$1.1
WRTA	\$8.7
<b>Total</b>	<b>\$59.2</b>

Source: MassDOT

## Local Assessments

Local Assessments represent local contributions to transit operations, and are funded through deductions from state aid to communities. In accordance with M.G.L. Chapter 161B, annual Local Assessments are based on the “loss” (operating cost minus revenue) for each specific route and the share of that loss and activity attributable to each town or city. Local Assessments are adjusted annually for all RTAs based on changes in the Consumer Price Index (CPI) for the Boston metropolitan area, but may not exceed an increase of 2.5%.<sup>7</sup> As a result, in years when inflation exceeds 2.5%, these revenues shrink in relation to total costs. For FY 2012, RTAs will receive a total of \$29.4 million in local assessments (see Table 6)

<sup>7</sup> The CPI is only estimated for larger metro areas by the Bureau of Labor Statistics. So the Boston CPI is applied to the entire state as there is no CPI measurement at the state level.





**Table 6: Local Assessments (millions; FY 2012)**

RTA	Amount
BAT	\$2.5
BRTA	\$0.8
CATA	\$0.4
CCRTA	\$1.5
FRTA	\$0.4
GATRA	\$2.9
LRTA	\$2.4
MART	\$1.8
MVRTA	\$2.2
MWRTA	\$1.6
NRTA	\$0.3
PVTA	\$6.7
SRTA	\$1.9
VTA	\$0.8
WRTA	\$3.3
<b>Total</b>	<b>\$29.4</b>

*Source: RTA Approved Budgets in Net Cost of Service Format*

### RTA Generated Revenues

RTAs generate revenue through fares, as well as through other sources such as the sale of capital assets, interest income, advertising, parking fees and other means. The RTAs directly control these funds, and the amounts collected are determined through a combination of RTA policies (for example, fares) and efforts (for example, the development of local partnerships or leasing of space). In 2011, urban RTAs generated over \$31.2 million in income through these sources, most of which was from fare revenue (\$23.1 million), and the non-urban RTAs generated \$1.7 million.

### Mix of Operating Funding

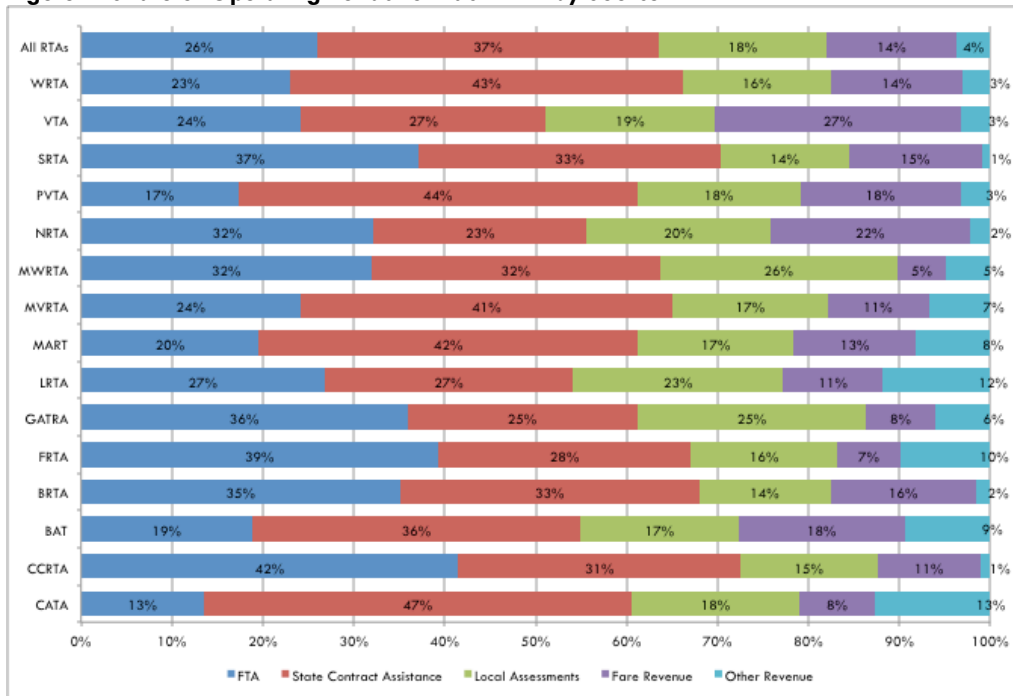
The overall mix of operating funding varies greatly between RTAs. As illustrated in Figure 4, the greatest amounts of variation are with federal and state funding, and fares:

- **Federal funding:** In total, federal funds allocated to all RTAs in Massachusetts represent 26% of their total funding. However, by individual RTA, amounts range from a low of 13% (CATA) to a high of 42% (CCRTA). There are many reasons for these differences, including eligibility for different types of federal funds, agreements made in large urban areas, MassDOT allocation methods, and historic precedents.
- **State funding:** In total, RTAs receive 37% of their funding through State Contract Assistance. However, by RTA, amounts range from a low of 25% (GATRA) to a high of 47% (CATA). As discussed in more detail below, State Contract Assistance is allocated largely based on historical precedent. In many cases, but not always, RTAs that receive lower levels of federal funding receive higher levels of state funding (for example, BAT, CATA, PVTA, and WRTA) and those that receive higher levels of federal funding receive lower levels of state funding (for example, CCRTA and SRTA). However, the relationship is not constant, and at least in recent years, state funds have not been allocated in a manner that attempts to balance federal funds.
- **Fare revenues:** In total, RTAs generate 14% of their funding through fare revenues. However, by RTA, fare revenue amounts range from 5% (MWRTA) to 27% (VTA).





**Figure 4: Share of Operating Funds for Each RTA by Source**



Source: MassDOT Approved RTA budgets

## Capital Funding

For capital funding, RTAs rely on federal and state funds, but not local funds. The most important funding programs (in terms of the total amount of funds received) are:

### FTA Section 5307 Urbanized Area Formula Funds

FTA Section 5307 funds, which were described above, are also available for capital purposes. Allocation and distribution methods for capital use are the same as those described above for operations. In FY 2010, Massachusetts' RTAs received \$14 million in Section 5307 funds for capital purposes.

### FTA Section 5309 Bus and Bus Facilities

FTA Section 5309 provides capital assistance on a discretionary basis in both urbanized and rural areas. Eligible projects include new buses, bus rehabilitation, support facilities, intermodal terminals, park-and-ride stations, bus rebuilds, passenger shelters and miscellaneous equipment. These funds are earmarked by Congress and flow directly to transit systems. MassDOT has no control over these funds. In 2010, BRTA, FRTA, and LRTA received \$4.3 million in Section 5309 fund.

### FTA Section 5310 Transportation for Elderly Persons & Persons with Disabilities

FTA Section 5310 provides capital assistance for the purchase of vehicles and related equipment used to provide transportation services to the elderly, persons with disabilities, and for families transitioning from public assistance to employment.

Section 5310 funds are distributed to states based on their respective populations of elderly and disabled residents, and in Massachusetts are administered by MassDOT. MassDOT directs approximately 50% of 5310 funding to the RTAs, 30% to private non-profits, 10% to local Councils on Aging, and retains 10% for



administration. In FY 2010, RTAs received \$3.1 million in FTA Section 5310 funds. Funds are dispersed as part of a competitive application process through the Community Transit Grant Program. MassDOT evaluates grant applications based on the following criteria:

- Does the project establish, preserve, or improve public transportation services in a community?
- Does the project address a recognized need in the community?
- Does the project leverage funds from other sources?
- Does the project reflect a community process of coordination and input?
- Does the project appear to be feasible as described?
- Is the project identified as a regional priority in the local Coordinated Public Transit – Human Services Transportation Plan?

### **FTA Section 5311 Formula Grants for Other than Urbanized Areas (Section 5311)**

FTA Section 5311 provides funds for transit planning, capital, operating and administrative assistance in non-urbanized areas with population less than 50,000. RTAs generally request these funds for operations rather than capital.

### **FTA Job Access Reverse Commute Program (Section 5316)**

This program supports capital, planning and operating expenses for projects that transport low income individuals to and from jobs or employment activities. Funds are dispersed as part of a competitive application process annually, and 5316 funds have been combined with other funds into a single application under the Community Transit Grant Program. Eligible projects apply through the Community Transit Grant Program and are prioritized by the Metropolitan Planning Organization with guidance from MassDOT; the prioritized list of projects is then evaluated by MassDOT.

Massachusetts received \$3.4 million in Section 5316 funds in FY2010. MassDOT directs the majority of these funds to the Boston urbanized area (55%), followed by the Springfield/Pioneer Valley area (12%) and Central Massachusetts (8%). Other small urban areas share 10% of these funds, and the rural RTAs share 4%. MassDOT retains 8% for administration.

### **FTA New Freedom Program (Section 5317)**

This program funds capital and operating expenses for new transportation services beyond those required by the American with Disabilities Act (ADA) of 1990. Like 5316 funds, applications are prioritized by the Metropolitan Planning Organization with guidance from MassDOT, and 5317 funds are dispersed as part of a competitive application process annually through the Community Transit Grant Program. Massachusetts received \$1.8 million in Section 5317 funds in FY2010. MassDOT distributes Section 5317 funds on the same basis as Section 5316 funds; the majority of these funds are distributed to Boston (56%), then Springfield/Pioneer Valley (10%), Central Massachusetts (7%) and Cape Cod (4%). Small urban areas share 10% of these funds, and the three rural RTAs share 5%. MassDOT retains 8% for administration.

### **Congestion Mitigation and Air Quality (CMAQ) Improvement Program**

The CMAQ program is jointly administered by the Federal Highway Administration (FHWA) and the FTA, with funds available for projects that improve air quality and/or reduce congestion, and can be used for capital and start-up operating purposes (up to three years). These funds are allocated to areas with air quality problems based on a formula that takes into account the population and severity of air quality status for each area of the country. At the local level, CMAQ project selection is controlled by MPOs. For a project to be eligible for CMAQ funding, the RTAs must work with their respective Metropolitan Planning Organization or Regional Planning Commission to get it included in the regional Transportation Improvement Program (TIP).



## Massachusetts RTA Capital Assistance Program

The Regional Transit Authority Capital Assistance Program (RTACAP), which is administered by MassDOT, provides local funds for RTA capital projects, including matching funds for federally funded projects. The program is funded through state bond proceeds, and for FY 2012, the RTAs are budgeted to receive \$6.7 million. For projects to be eligible for funding they must be listed in the Metropolitan Planning Organization's TIP, and the RTAs must provide MassDOT with project cost estimates. As described in more detail below, these funds are allocated largely as block grants based on each RTA's fleet value and deferred fleet replacement needs. RTAs need to apply for funds and describe how they will be used, but MassDOT does not conduct any needs-based analyses or evaluate the requests to any significant extent. As currently structured, there is no guaranteed capital funding stream for the three rural RTAs. These three agencies rely on MassDOT to allocate RTACAP funds.

Until recently, annual capital funding allocations to each RTA were based largely on historical distributions. As with State Contract Assistance, MassDOT desires to change the approach to a comprehensive needs-based process. Until this can be done, MassDOT established an "interim" model that it views as better than the historical approach but still not sufficient to meet ongoing needs. This interim approach uses estimated RTA transit fleet replacement costs as a proxy for each agency's total capital needs, with distributions based on a multi-step process:

1. Develop statewide Fleet Replacement Statement that includes a calculation of each RTA's percentage of total fleet replacement needs and fleet replacement backlog.
2. Calculate distribution targets based on the total available RTACAP program funding, and each agency's percentage of total statewide fleet replacement needs.
3. Adjust distribution targets to reflect the fact that the three non-urbanized RTAs do not receive FTA Section 5307 capital funds on a formula basis. Targets are adjusted to fund these rural RTAs at 90% of what they *would* receive if FTA formula funds *were* available to them. This rural funding is then subtracted from the RTACAP available to be shared by the 12 urban systems.
4. Final "blended" distribution targets are calculated for the urban systems based on the percentage of their current fleet replacement needs and backlog with a floor of \$206,000. This blended target is considered an interim step through FY 2013 towards developing a distribution formula.

This approach is designed to shift greater levels of investment to areas with deferred capital needs, while maintaining funding to all agencies based on the relative size of each RTA's fleet and scope of services. However, it does not consider need and does not include a competitive process. MassDOT is now beginning to track other State of Good Repair needs such as operating facilities, passenger facilities, and equipment/systems. However, these factors have yet to be estimated in any detail nor incorporated into the annual RTACAP Allocation Process.

## Massachusetts Toll Credits

FHWA and FTA allow states to substitute certain previously financed toll investments for state matching funds.<sup>8</sup> This permits states to use toll credits as a "soft" match for federal funds. MassDOT determines the projects for which these credits are used, and has made them available for some RTA capital projects. There are currently \$87.5 million in approved toll credits available for Massachusetts (FY 2012). The first RTA project to be supported through this program was a recent \$13.7 million fleet acquisition by PVTA. MassDOT does not have a defined program for use of the toll credits.

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<sup>8</sup> Section 120 of Title 23



## Massachusetts Mobility Assistance Program

The Mobility Assistance Program (MAP), which is administered by MassDOT, provides approximately \$3 million per year for the purchase of vehicles and related equipment to be used in the provision of transportation services to the elderly, persons with disabilities, and families transitioning from public assistance to employment for which existing public and/or private mass transportation is unavailable, insufficient, or inappropriate. State funds provided under this program are used to match federal 5310 funds. Applicants for MAP funds must be either a public organization or a private non-profit corporation, and coordinate with their Regional Planning Agency or local Regional Transit Authority.

## STATE FUNDING IN OTHER STATES

States vary in the ways that they distribute funds to transit authorities, and several states have relatively recently changed their approach to funding transit to a more needs-based approach. Practices in other states include:<sup>9</sup>

### New York

New York State funds transportation through two major programs: the Mass Transit Operating Assistance (MTOA) fund and the State Dedicated Transportation Trust Fund (SDTF). Funding for both programs comes from a petroleum business tax (PBT) levied on any company that produces, refines, or imports petroleum in the state. The MTOA provides transit operating assistance to both “upstate” and “downstate”<sup>10</sup> transit providers. The SDTF provides capital funds for both highway/bridge (63%) and transit (37%) projects, with 3% going to upstate transit projects.

As in Massachusetts, New York uses two different funding processes for its upstate (smaller) and downstate (larger) transit systems. For its upstate transit providers, New York provides both operating and capital assistance, as described below.

#### State Operating Assistance

The State Transit Operations Assistance (STOA) fund is a permanent dedicated fund for transit, supported by general funds, as well as the MTOA. NYSDOT distributes operating funds to transit agencies using a simple formula that is based on ridership and the amount of service provided. For FY 2012, the amounts provided were:

- \$0.405 per passenger carried
- \$0.69 per vehicle mile driven.

These amounts are adjusted annually based on the amount of funding available. Distributions are based on operating statistics (revenue passengers and vehicle mile data) reported to NYSDOT on a quarterly basis. To receive state funding, transit systems must also provide a local match equal to the state funding amount.

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<sup>9</sup> Note that Delaware, Maryland, New Jersey and Rhode Island were not evaluated due to their statewide approach toward the delivery of transit services.

<sup>10</sup> The downstate part of the New York MTOA also benefits from special taxes and fees in the New York City region intended to support the large New York City Metropolitan Transit Authority (MTA).



### State Capital Assistance

The transit portion of the SDTF provides funding for the capital needs of non-MTA transit providers. Each year, NYSDOT updates a six-year capital program based upon the transit systems' identified unfunded needs to determine how to allocate the SDTF. Unfunded needs were initially identified in a statewide 20-year unfunded needs assessment study performed in 2007. No local match is required, and funding is allocated according to the following steps:

- NYSDOT develops an inventory of eligible capital needs for all non-MTA systems
- NYSDOT projects the amount of federal/local funding available for such projects
- Systems are allocated funds based on their level of state of good repair and replacement needs (new initiatives and expansion projects are not included)
- Funding is awarded based upon the percentage of unmet needs

The Omnibus Fund is an additional capital funding program that provides 10% state funds to match federal capital projects (non-MTA). Local sponsors are also responsible for 10 percent, effectively matching federal dollars on an 80/10/10 basis.

### Pennsylvania

In 2009, Pennsylvania passed Act 44, which among other things transformed the way that transit is funded in Pennsylvania. As is still the case in Massachusetts, Pennsylvania had funded transit primarily on a historical basis that did not take into account changes in need or performance. The act changed the funding process to one that is now very strongly tied to performance. It also strengthened oversight by the Pennsylvania Department of Transportation and is intended to promote operating and financial efficiency. Major provisions of the new funding process are as follows:

#### State Operating Assistance

Pennsylvania's new funding process for operations is formula-based, and emphasizes ridership and system size:

- 25% based on existing ridership
- 10% based on senior passengers
- 35% based on revenue vehicle hours
- 30% based on revenue vehicle miles

Because the immediate use of this formula would have produced significant cuts in funding for some transit systems, Act 44 also included hold harmless and transition provisions. These include:

- Notwithstanding cuts in overall funding levels, all 22 transit systems would be held-harmless and receive at least as much funding as under the prior system<sup>11</sup>
- The new formula would apply to amounts above the hold harmless amounts
- Systems that would benefit from the new formula could not receive increases that exceeded 50% in the first year or 20% in succeeding years

Other relevant provisions include a 15% local match for state operating assistance, and additional funding for large urban systems (Philadelphia and Pittsburgh).

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<sup>11</sup> Note that due to reductions in state transit funding, transit systems throughout Pennsylvania have had funding reduced.



## State Capital Assistance

Transit capital projects are now programmed on a statewide basis through the regional planning process using three primary funding sources:

1. The discretionary Asset Improvement Program
2. The formula-based Capital Improvement Program
3. The New Initiatives Program for fixed guideways

The Asset Improvement Program funds statewide transit capital projects on a discretionary basis that considers agency needs. A local match of 3.33% is required, and funds are distributed for the following priorities (ranked highest to lowest):

1. Payment of existing debt service commitments
2. Provision of matching funds for federally approved projects
3. Provision of funds for non-federal capital projects prioritized by:
  - a. Emergency/mandatory/safety projects
  - b. Replacement of existing assets that have exceeded their useful life
  - c. Non-emergency asset replacement projects
4. Provision of funds for asset expansion (not New Starts), where a project shows a return on investment that improves operating efficiency and/or customer service

The Capital Improvements Program account is distributed by formula based on passenger trips, and there is no local match required.

## Washington

The Washington State Department of Transportation (WSDOT) uses a consolidated application process for both state and federal transit grants, with timelines for both types of grants brought in line with the state biennium. This allows applicants to submit their proposals for all types of grant funding once every two years, instead of applying separately for each type of grant program.

The process is needs-based and uses the following criteria:

- Project Component
  - Does the project establish, preserve, or improve public transportation services?
  - Does the project address a recognized need?
  - Does the project reflect a community process of coordination and input?
  - Availability of other project matching funds
  - Project feasibility
- Applicant Component
  - Management capability
  - Track record with previous grant awards
  - Financial capability and resources for implementation
  - Long term project commitment (beyond grant timeframe)
- Performance Component
  - Community benefits
  - Identification of specific performance measures to be used to determine project success
  - Ability to improve efficiency and effectiveness
  - Existing performance (for ongoing projects)

WSDOT evaluates all applications in collaboration with representatives from the Washington State Transit Association, plus representatives from other state agencies, community groups, rider groups,





regional planning associations, tribal organizations, and other groups. These community grant review committees are reappointed each year.

## Iowa

Iowa devotes 0.8¢ of its sales tax collected on motor vehicles and accessory equipment sales to public transportation. These State Transit Assistance (STA) funds are administered by the Iowa DOT, and are available for operating, capital, and planning expenses. The funds are allocated based on two formulas:

1. Funds are first split between urban and regional systems based on vehicle revenue miles.
2. Funds are then distributed to individual systems within each category based on a formula that emphasizes local funding and cost efficiency:
  - Locally generated income (50%)
  - Cost per trip (25%)
  - Cost per vehicle revenue mile (25%)

Iowa's Office of Public Transportation also retains a maximum of \$300,000 of the total STA funds for technical training and statewide initiatives.

## Virginia

Virginia provides funding for operating and capital purposes. Operating funds are allocated largely on a historical basis, but with some qualifications, and capital funds are allocated using a tiered system that reflects the state's transit capital priorities.

### State Operating Assistance

Virginia allocates operating funding that is based largely on a historical basis, but also includes adjustments for year-to-year changes. This process:

1. First takes the total amount of available operating assistance and allocates it among applicants based upon operating expenses from the previous fiscal year.
2. Second, two "tests" are then performed, with amounts adjusted based on the results. These are:
  - **Maximum Eligibility Test:** Applicants may be reimbursed for up to 95% of Administration and Maintenance expenses after subtracting other revenues (such as federal aid, other state assistance and farebox returns). This is the Maximum Eligibility amount.
    - If the Operating Assistance amount identified in Step 1 above is less than the Maximum Eligibility amount, an agency's operating assistance amount is not adjusted.
    - If the operating assistance amount is more than the Maximum Eligibility amount (this rarely occurs), then their operating assistance is reduced to the Maximum Eligibility.
  - **Maintenance of Effort Test:** If state funding increases from one year to the next, transit systems must meet one of two requirements in order to be eligible for an increase in funding:
    - Local funding (farebox revenue plus local operating support) must at least as high as it was in the previous year.
    - The number of revenue hours of service must be as least as high as in the previous year.
    - If neither condition is met, then the amount of state Operating Assistance will be reduced until local funding levels as calculated in the second tier evaluation are maintained.

### State Capital Assistance

For capital assistance through Virginia's Mass Transit Capital Fund (MTCF), funding decisions are made by the Commonwealth Transportation Board (CTB), which is a 17 member board whose members are





appointed by the Governor. As described in its policy handbook,<sup>12</sup> the CTB's capital-related transit priorities are:

- Maintain existing transit assets as the first funding priority.
- Match new investments with quantifiable service needs and local commitments.
- The asset management system shall support the development of a statewide transit and human service capital replacement and improvement program. Beginning in FY2010, DRPT shall submit a report to the CTB on asset management in the early development stages of the annual Six-Year Improvement Program.
- All proposed transit projects shall include sufficient justification for funding and shall clearly address an identified transit need.
- Proposed projects shall include an implementation plan that adequately addresses the need for any necessary clearances and approvals.
- Proposed projects shall be advanced to a state of readiness for implementation in the target year indicated in the grant application.
- A project shall be considered ready if grants for the project can be obligated and the project can be initiated within one year of the award date, or in the case of larger construction or procurement projects, obligated according to an accepted implementation schedule.
- To be eligible for replacement or rehabilitation, transit assets shall have reached the end of their useful life or the appropriate rehabilitation interval as specified by the Federal Transit Administration. (Exceptions may be considered if unforeseen circumstances result in irreparable damage to a transit asset, if a grantee has secured approval by the Federal Transit Administration or, in the case of projects that do not receive federal funds, if the transit operator provides sufficient justification in terms of safety, security or financial rationale.)
- All new projects exceeding \$2 million and/or that involve construction of transit facilities to include fixed guideway systems shall conform to threshold requirements detailed in program guidance before the project may be considered eligible for state funding.

Before decisions are made by the CTB, applications for capital funding are reviewed by the Virginia Department of Transportation's Department of Rail and Public Transportation (DRTP). Applications for funding must provide a standardized set of information and are evaluated the basis of:

- Project Justification – explanation of the need/problem that the project will address
- Planning – documentation that sufficient planning has been conducted to execute the project
- Project Scope – approach to addressing the need/problem
- Project Readiness – ability to initiate and advance the project within the fiscal year the funds are applied for
- Technical Capacity – identification of the project management team and ability to execute the project
- Project Budget – ability to execute the project scope within the project budget
- Project Schedule – ability to execute the project scope within the project schedule
- Monitoring and Evaluation Plan – applicant's approach to measuring performance and evaluating the results of the requested capital project(s)

Finally, funds are allocated according to a hierarchy of state goals, which are:

- Tier 1: Replacement/rehabilitation of revenue vehicles based on the statewide asset management system
- Tier 2: New Starts/new facilities based on consistency with state Transit Service Guidelines and a Public Benefit Model

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<sup>12</sup> Policy Handbook, Commonwealth, Transportation Board, Virginia Department of Transportation, Policy Division, July 2010.



- Tier 3: Discretionary programs—all other activities based on state goals and objectives

## SUMMARY OF ISSUES/POTENTIAL IMPROVEMENTS

Massachusetts allocates state transit funding in a manner that is different than in most other states, and in a manner that most parties are dissatisfied with. To date, attempts by MassDOT and the RTAs to develop a mutually agreeable process have not been successful. Part of the difference results from very different objectives and perspectives. At the state level, current administrative policy is to develop and implement performance-based measurement systems for its transportation systems. As the major provider of RTA transit funding, the state has a very strong interest in ensuring that transit funds are spent as effectively as possible. However, many of the RTAs believe that RTA decisions should be made locally and that the state should not play a significantly larger role.

### Issues

To find common ground, many issues have been identified, and these include:

#### Operating Funds/State Contract Assistance

- **Funding distributions are based on historical levels that do not adequately consider need or recent changes.** In many cases, service needs have changed, but the distribution of funds based on historical levels encourages the maintenance of a static system.
- **Funding distributions that are based on historical levels are inequitable.** All RTAs view the existing funding process based on historical levels as inequitable as it does not consider current circumstances or needs. However, the specific reasons that RTAs dislike the existing system are varied and, as a result, there has been little agreement among them on how to develop a more equitable system.
- **Funding distributions based on historical levels hinder innovation and the development of new services.** Certain federal funds such as CMAQ, Section 5316 JARC and Section 5317 New Freedom can be used to support services but are subject to a one-time or short-term appropriation. While many RTAs use these funds to support new demonstration or pilot services, they often cannot be continued without reducing or eliminating other services within that RTA's area. As currently structured, there is no incentive program to provide increased funding for successful new services.
- **SCA funding distributions do not consider the availability of other funding sources.** Different RTAs are eligible for different types of federal funding, and as a result, some RTAs may need more or less SCA than others.
- **Funding in arrears makes budgeting challenging.** RTAs receive SCA and local assessments one to two years after operating expenses are incurred, which can make it difficult for RTAs to manage their budgets in cases where funding has been cut after money has been spent.
- **Funding in arrears increases operating costs.** RTAs borrow money to pay for operations until SCA funds are received. This financing requires interest payments that increase the overall cost of delivering transit services. To achieve forward funding, similar to the MBTA, MassDOT estimates that a one time injection of \$70 million in additional funding would be needed to cover lagged revenues and pay down financing costs for all the RTAs in Massachusetts.



- **Available information is insufficient.** At present, relatively little information is available on service performance and needs, which makes the development of a more needs based process more difficult.
- **Short-term implementation challenges.** With any change to funding allocation methods, some RTAs will receive proportionally more and others proportionally less.

### State Capital Assistance

Capital needs in Massachusetts, as everywhere else in the United States, greatly exceed resources. As a result, it is critically important that capital expenditures be based on a careful consideration of need, and that is currently not the case. As a first step toward improving the state's capital funding processes, MassDOT has implemented an interim program that uses fleet replacement value as a proxy for overall RTA capital needs. MassDOT recognizes that this change, while an improvement, still falls short of an effective needs-based process. Issues that need to be addressed in the development of a more effective process include:

- **MassDOT distributions to RTAs are not based on need.** MassDOT distributions of state and federal funding are generally based on fleet size and value, rather than the condition of all assets or the merits of new projects.
- **Asset repair and replacement needs are not fully known.** According to MassDOT, Massachusetts' RTAs have a 20% older fixed route fleet than peer systems and an estimated \$223 million in deferred capital needs. However, detailed asset inventories or condition assessments have not been prepared on a statewide basis. The scale and scope of asset replacement needs is not fully known.
- **Capital funds must be spent in the fiscal year awarded.** MassDOT requires that capital funds be spent in the fiscal year awarded, but the FTA allows the use of federal funds over a multi-year period. Allowing for capital funds to be used over a multi-year period would assist RTA capital planning as funds could be used in sync with Federal funds.
- **Federal funds are not leveraged to the extent possible.** RTAs are encouraged to pursue federal discretionary funds (Section 5309), but often the required local match is not available to properly leverage these awards. MassDOT and the RTAs need to work more collaboratively on long term capital planning, or better communicate to match projects with available resources, to ensure federal investment is maximized.
- **Cost estimates are sometimes unreliable.** When an RTA provides a capital cost estimate to MassDOT as part of its funding request, there is no system in place to vet or verify the reasonableness of the estimate. In the past, the costs of several significant projects have escalated following grant award. This leads to a delay in project implementation and potentially the ineffective use of available resources.
- **Limited coordination to achieve statewide goals.** Capital project selection is done at the regional level, often without sufficient consideration of statewide goals or initiatives.
- **Long term costs are not considered.** Life-cycle costs for facilities, fare collection systems and other investments are not always fully understood or forecast at the time of project award. For example, several new intermodal passenger facilities have been built over the last decade, yet the long-term maintenance needs of these facilities are not programmed. MassDOT has been directed to consider life-cycle costs in project selection but has not yet done so.

### Potential Improvements



As described above, RTAs are funded through a variety of sources, each of which differs in terms of eligibility, who controls the funds, and how they are allocated. To date, most emphasis has been placed on how state funds are allocated. State funds are only one piece of the overall funding picture, but particularly important to this project as the allocation of state funds is the area in which MassDOT and the RTAs can work together to produce meaningful improvements.

As described above, neither MassDOT nor the RTAs are satisfied with the current process. The primary objectives that MassDOT and the RTAs have articulated that they desire to base improved funding processes on are:

**MassDOT**

Needs-Based  
Performance-Based  
Equity

**RTAs**

Needs-Based  
Equity  
No reductions from existing funding levels for any RTA

At a conceptual level, both MassDOT and the RTAs agree the funding should be allocated on a more need-based level and more equitably. The major area of disagreement is whether or not new processes should be performance-based. MassDOT, as part of larger state initiatives, is moving toward performance-based systems in all areas. Many RTAs, however, believe that because they provide different services to different areas, performance-based systems would be inequitable.

## **Needs-Based Funding**

There are two primary approaches to needs-based funding. The first is to use formulas as a surrogate for needs, and the second is through detailed analyses of needs. Formulas are easier and more straightforward to use, while detailed analyses of needs can provide better results but require much more effort. Also, surrogates work better when needs change slowly, but do not work well when there are large year-to-year changes. As a result, the most common approach is to use formulas for operating funding and a detailed analysis of needs for capital funding.

## **Potential Operating Formulas**

As described in this document, a large number of measures are used throughout the country to allocate operating funds. The most commonly used are:

- Population
- Population density
- Ridership, including passengers miles
- System size, on the basis of vehicle hours or miles
- Cost efficiency (cost per passenger, cost per vehicle service hour, etc)

When formulas are developed, they are recognized as imperfect, but also as reasonable, transparent, and simple to understand and administer. Single formulas are also used to allocate funding among transit systems that vary greatly in terms of the types of services provided, system size, and areas served. For example, as described above, the FTA uses two simple formulas to allocate all Section 5307 funds.

The second approach to needs-based funding is through the documentation of specific needs. As described in *Initiative 2 Improve Service Planning*, and *Initiative 6 Improve Capital Planning*, existing needs are not well documented. However, with the potential improvements described in those initiatives, the necessary information could become available over a period of years for operating needs, and relatively quickly for capital needs. Needs-based approaches are generally used to a much greater extent for capital funding than for operating funding, although operating processes often reserve a portion of funding for new needs-based programs and projects.



Over the past few years, attempts were made to introduce a formula-based approach to the allocation of SCA. One of the challenges with these efforts was that there was no mutually agreeable starting point from which to work, and thus there were disagreements over proposals in their entirety, rather than discussions on how to make them work.

Moving forward, the development of a starting point would be a logical place to begin. One new starting point could be the FTA Section 5307 formulas, both of which are well understood, use existing data, and are already used to provide funding for a wide mix of transit service types and applications. As was described above, these are:

### **Large Urban Area**

- Population
- Population density
- Bus revenue vehicle miles
- Bus passenger miles
- Fixed guideway revenue vehicle miles
- Fixed guideway route miles

### **Small Urban Area**

- Population
- Population density

Then, once the starting point has been established, MassDOT and the RTAs could work together to determine mutually agreeable changes to ensure that the objectives of all parties are considered and included.

## **Distribution of Capital Funds**

MassDOT and the RTAs agree that that the capital process should be based on actual needs rather than on historical patterns. However, the major impediment to the development of an equitable needs-based process is that the required information does not exist. As described in *Initiative 10 Better MassDOT/RTA Collaboration*, under Chapter 161B, “RTAs are directed to consult with MassDOT to prepare an annual program for mass transportation, including a long range program for the construction, reconstruction or alteration of facilities together with a schedule for implementation and comprehensive financial estimates of costs and revenues.” The RTAs do not do this, and MassDOT has not required them to do so. The fulfillment of this requirement would provide most, if not all, of the information required to develop a needs-based process.

In addition, because state capital funds are distributed largely on a block grant basis, MassDOT has not required the RTAs to provide detailed justification or documentation of capital requests. MassDOT could also require the same level of justification and other information as other states with more robust processes (for example, Minnesota) or by the FTA.

Once the information is available, then the actual process will still need to be developed. As for the allocation of operating funds, a starting point should first be established, and that starting point could be established through addition work to identify best practices in other states.

## **Balancing of Federal Funds**

As described above, many RTAs receive different amounts of federal funding based on the types of funding that they are eligible for. For operations and as a percent of total operating budgets, this ranges from a low of 13% for CATA to a high of 42% for CCRTA.



With the development of a formula-based allocation system, State Contract Assistance could also be allocated in a manner that balances differences in federal funding levels. To do this, whatever formula is adopted could be applied to the total amount of federal and state operating funding, which state allocations set to differences between each RTA's total share and its federal share.

### **Hold Harmless**

Many RTAs feel very strongly that with changes to funding allocation processes, no RTA should receive less funding that they do under the present process (that they should be “held harmless” from changes). At current funding levels, this would mean that no changes would be possible.

However, the provisions of a new process, or processes, could be implemented over time as total funding allocations increases. In this case, RTAs that now receive more funding than they would under a new process would have their funding held constant until their share under the new process exceeded their current amount. Depending upon how fast or slowly funding levels increase, this is a process that could take years.

### **Actions to Consider**

Overall, discussions about modification to the funding structure would benefit from recognition of the fact that funding levels are in line with other states, and that resources are limited and it is unlikely that additional monies will be identified over the near term. Any funding allocation system needs to be designed to work within existing funding levels, as well as in future years when additional resources may become available. Furthermore, any new transit funding strategies implemented must consider the needs of the RTAs, local customers, and statewide objectives.

Potential solutions and improvements—for discussion at the Beyond Boston workshop in April include:

1. As described above, MassDOT and RTAs have defined basic funding principles (Needs, Performance, Equity, and Hold Harmless).
  - a. Are there other principles that should be included?
  - b. Should any of the four not be included?
  - c. How would you rank their importance?
2. What types of measures should be included for operating assistance?
  - Service area population characteristics (Should funding be based on latent demand?)
  - Ridership (should funding be based on actual demand?)
  - System size (should bigger systems receive more funding than smaller systems?)
  - Service effectiveness (should systems be rewarded for performance?)
  - Cost efficiency (should systems be rewarded for minimizing costs?)
  - Other?
3. Should federal funding be considered in the determination of state operating assistance distributions?
4. Both MassDOT and the RTAs desire funding processes that are “equitable.” How would you define equitable?
5. What should be done to better determine capital needs?
  - a. Develop annual Programs for Mass Transportation by RTAs?
  - b. Develop asset management plans?



- c. Better justify capital requests?
- 6. Should some funds be reserved for special purposes?
  - a. Statewide initiatives (for example, Google Transit, CharlieCard, etc.)?
  - b. Service experimentation/innovative programs?
  - c. Planning?
  - d. Technical assistance?
  - e. Other?
- 7. Should funding be tied to statewide goals or targets for service and infrastructure?
  - Safety?
  - State of good repair/asset replacement?
  - Expansion and enhancement?
  - Other?
- 8. Are there circumstances in which funds should be shifted between RTAs?
- 9. What is the relative importance of:
  - a. Improving the allocation of state operating assistance
  - b. Improving the allocation of state capital assistance
  - c. Moving to forward-funding





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